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ECHO

Vaginal leucocytes predict bacterial infection in prepubertal girls

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Doctors managing vulvovaginitis before puberty recommend microscopic examination of vaginal fluid for leucocytes at the first visit, with microbiological investigation. Finding leucocytes raises the chances of finding bacterial pathogens, they say.

The authors carried out a retrospective review of girls aged 2–12 years with symptoms of vulvovaginitis. Sexual abuse was not suspected. Vaginal discharge was the commonest symptom, present in 92% of 80 girls. Vaginal secretions were collected aseptically for microscopic examination, Gram staining, and culturing to isolate candida and bacteria.

Bacterial infections occurred in 29 (36%) of all girls, 59% of them with group A β haemolytic streptococci, 24% with *H influenzae*, and 24% with *S aureus*—10% alone and 13% in mixed infections. Candida was not isolated. Twenty five girls with symptoms and bacterial infections received antibiotics and their infection resolved.

Leucocytes were seen in vaginal fluid from 24/29 girls with cultured pathogens and 21/51 without, a sensitivity of 83% and a specificity of 59% for bacterial infection.

Vulvovaginitis is the commonest gynaecological problem in this group. While many girls have no specific cause identified, vulvovaginitis can result from infection with specific bacterial pathogens. The authors point to drawbacks to their study, specifically not screening for sexually transmitted pathogens, on the assumption that the girls had not been abused, and the lack of a control group or repeat screening after antibiotic treatment.

▲ *Archives of Disease in Childhood* 2003;**88**:324–326.